



Anaplasmosis

Definition:

Anaplasmosis is an infection caused by the bacterium *Anaplasma phagocytophilum*. It is most commonly transmitted by the bite of an infected deer tick (*Ixodes scapularis*).

Signs and symptoms:

Symptoms of anaplasmosis can range from mild to very severe and may include: fever, headache, muscle pain, malaise, chills, nausea, abdominal pain, cough, and confusion. Severe symptoms may include: difficulty breathing, hemorrhage, renal failure, or neurological problems. It can be fatal if not treated correctly. People who are immunocompromised or elderly are at higher risk for severe disease.

Transmission:

Anaplasmosis is primarily transmitted to a person through the bite of an infected deer tick; this tick is endemic throughout Maine. Rarely, it can also be transmitted by receiving blood transfusions from an infected donor.

Diagnosis:

Anaplasmosis is diagnosed by clinical symptoms and laboratory tests. A blood test is necessary for confirmation. Co-infections with other tick-borne diseases may occur and should be considered.

Role of the School Nurse:

Prevention

- Provide education on prevention efforts including: wearing protective clothing, using an EPA-approved repellent, using caution in tick infested areas, and performing daily tick checks.
- Encourage the use of EPA approved repellents when outside (following local policy guidelines), and always performing a tick check when returning indoors.
 - School nurses can apply repellent with parental permission
- If a tick is found, the school nurse should remove the tick using tweezers or a tick spoon.
 - Tick identification cards are available at: <http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/posters/index.shtml>.
 - Testing of the tick is not recommended. Whole ticks in safe containers may be given to parents.

Treatment Recommendations

- If symptoms are noted, the child should be referred to his or her primary care provider for treatment.
- Antibiotic treatments are available and are usually prescribed for 10 - 14 days.

Exclusions

- There is no need to exclude students from school for anaplasmosis.
- Educational modifications may be warranted in children with a positive diagnosis.

Reporting Requirements

- Anaplasmosis is reportable within 48 hours of recognition or strong suspicion of illness.

Resources:

- Maine CDC Anaplasmosis website (including fact sheet): www.maine.gov/dhhs/anaplasmosis
- Tick-borne Disease in Maine: A Physician's Reference Manual: <http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/documents/tick-reference-guide.pdf>

- Insect Repellent Finder (including time of protection) <http://cfpub.epa.gov/oppref/insect/index.cfm#searchform>
- Tick Submission information (for identification) <http://extension.umaine.edu/ipm/tickid/>
- Federal CDC Anaplasmosis website: <http://www.cdc.gov/anaplasmosis/>